

EFFICACY REVIEW

PRODUCT: Premise 75 Insecticide; Premise 2 Insecticide, Premise 0.5 SC, Premise Pro Insecticide

REG. NUMBER: 432-1332, 432-1331, 432-1362, 432-1449

DATE: 4-13-07

DP BARCODE: D336293

DECISION NUMBER: 373141

GLP: No

CHEMICAL: Imidacloprid (75%)

CHEMICAL NUMBER: 129099

PURPOSE: Provide efficacy data to support the addition of exterior perimeter/interior spot treatments on the label.


MRID: 47031201. Reid, B.; Brill, J. (2006) Performance Data – The Efficacy of PREMISE Insecticide Using 810.3600 / Structural Treatments Exterior Perimeter/Interior Spot Treatment Protocols as Determined in Field Use Research: Final Report. Project Number: USA03K07, USA04K07, USA05K07. Unpublished study prepared by Bayer Environmental Science. 2181 p.

TEAM REVIEWER: Kable Bo Davis

EFFICACY REVIEWER: Kable Bo Davis, M.S., Entomologist

SECONDARY

EFFICACY REVIEWER: Joanne Edwards, M.S., Entomologist



4-13-07

BACKGROUND:

The registrant, Bayer, is submitting two year efficacy data from their current Experimental Use Permit (EUP No. 432-EUP-7) to support their request for the acceptance of a new use pattern for Premise insecticides, i.e. exterior perimeter/interior spot treatment. This proposed approach is comprised of complete exterior applications, and interior applications limited to mandatory applications of active termite sites and optional treatment of critical areas (such as bath traps and plumbing utilities).

The two year EUP was granted in October, 2003 and allows for the treatment of up to 825 properties. The data collected from this experimental permit is applicable towards the data requirements needed for the Premise 75 Insecticide in Water Soluble Packets (432-1332) label revision to include the exterior perimeter/interior spot treatment approach. In addition, this submission will be also be used to support the label revisions for the following Bayer products: Premise 2 Insecticide (432-1331), Premise 0.5 SC (432-1362), and Premise Pro Insecticide (432-1449).

DATA REVIEW:

The EUP submission is comprised of data collected from 226 termite infested homes, distributed across 16 states (AL, AZ, CA, FL, GA, HI, KY, LA, MO, NC, NE, OH, OK, SC, TX, and VA). Each structure was infested with either one of several different species of *Reticulitermes* spp., *Coptotermes formosanus*, or *Heterotermes aureus*.

All treatments used the approved labeled use rates of (0.05% or 0.1%) and were applied by licensed certified applicators who were monitored by either a Bayer representative or a University researcher. Initial applications consisted of full volume, complete outside foundation wall treatments, and targeted indoor active site applications. In addition, optional interior applications were allowed for vulnerable areas.

To monitor the efficacy of the initial application, several inspections were scheduled for each home during the first six months, then every six months or annually for two years. A Bayer representative or University researcher were often present during initial and follow-up inspections.

It should be noted that 24 structures required additional Premise to be added as a result of incomplete initial treatments or from university researchers intentionally leaving active sites within the structure untreated. These structures were then treated following label directions and were given a new completion date (at the suggestion of ASPCRO).

Results:

Of the 226 homes that were treated initially following label directions, nine required retreatment. From the 24 homes that initially did not follow label directions and had to have corrective applications, six required retreatment. As a result, a total of 15 homes required retreatment. Premise demonstrated a percent control of 93.4%.

RECOMMENDATIONS:

The submitted data support the addition of exterior perimeter/interior spot treatments on the following labels: Premise 75 Insecticide (432-1332), Premise 2 Insecticide (432-1331), Premise 0.5 SC (432-1362), and Premise Pro Insecticide (432-1449).

Labeling Issues- The following changes within the directions for use must be made to each of the above mentioned Premise labels.

1. Throughout the **Exterior Perimeter/Interior Spot Treatment** portion of the label, the requirement that treatments must extend a minimum of 2 to 3 feet on either side of the infested site must be rephrased to say that treatments must extend a minimum of 3 feet on both sides of infested site.
2. Within the **ACCESSIBLE CRAWL SPACES** portion of the **Exterior Perimeter/Interior Spot Treatment** section of the label, revise the sentence *"Rodding may be done from the bottom of a shallow trench to the top of the footing or to a maximum of depth of 4 feet, or according to state and local regulations."* to read *"Rodding may be done from the bottom of a shallow trench to the top of the footing or to a minimum of depth of 4 feet."*
3. Within the **BATH TRAPS** portion of the **Exterior Perimeter/Interior Spot Treatment** section of the label, revise the sentence *"...the soil can be treated by rodding or drenching the soil at a volume of no less than 1 gallon of solution per square foot."* to read *"...the soil can be treated by rodding or drenching the soil at a volume of no less than 3 gallons of solution per square feet."*